

Amdt. dated April 10, 2006
Reply to Office action of February 10, 2006

Serial No. 10/719,129
Docket No. TUC920030145US1
Firm No. 0022.0063

REMARKS/ARGUMENTS

Claims 1-24 are pending in the application. Claims 1, 7, 9, 15, 17, and 23 have been amended. Reconsideration is respectfully requested. Applicants submit that the pending claims 1-24 are patentable over the art of record and allowance is respectfully requested of claims 1-24.

Applicants would like to thank Examiner Sun for holding a telephone interview with their representative, Janaki K. Davda, on Friday, April 7, 2006 at 1:00 EST. Claim 1 and the cited prior art were discussed. No agreement was reached.

Claims 1, 5-8, 9, 13-16, 17, and 21-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Reinemann (Pub. US 2003/0115118 A1) in view of Tzeng et al. (US 2003/0210651). Applicants respectfully traverse. Also, Applicants note that paragraph 11 of the final Office Action cites a 102(e) rejection, but paragraph 10 refers to 103(a). In light of this and because multiple references are cited, Applicants will treat the rejection as a 103(a) rejection.

Amended claim 1 describes throttling data transfer. An amount of resources that are in use is determined. When the amount of resources reaches a high threshold, one or more primary control units are notified to temporarily stop sending data by sending a message, when the amount of resources reaches a high threshold, notifying one or more primary control units to temporarily stop sending data by sending a message, wherein the one or more primary control units that are notified to temporarily stop sending data are selected based on which ones are using a largest amount of resources (e.g., Specification, page 14, paragraph 46; FIG. 6). When the amount of resources reaches a low threshold, each previously notified primary control unit is notified to resume sending data by sending a message. For example, if primary control units A, B, and C are each using 2 percent of cache, while all other primary control units are each using 1 percent of cache, then primary control units A and B may be sent messages to temporarily stop sending data (e.g., Specification, page 14, paragraph 46). Then, the next time the resource management process 224 is selecting one or more primary control units to receive a message to temporarily stop sending data, primary control unit C may be selected (e.g., Specification, page 14, paragraph 46).

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Amended claim 7 describes that the one or more primary control units selected have not already received a message to temporarily stop sending data without a subsequent message to resume sending data(e.g., Specification, page 14, paragraph 46; FIG. 6). For example, with reference to the previous example of primary control units A, B, and C each using 2 percent of cache, with primary control units A and B having been sent messages to temporarily stop sending data, the next time the resource management process 224 is selecting one or more primary control units to receive a message to temporarily stop sending data, primary control unit C may be selected (e.g., Specification, page 14, paragraph 46).

In the final Office Action, the Examiner submits that Reinemann "discloses setting a flag causes a hosted process I/O to 'return a disk-full error message' in paragraph 35". The Examiner submits that setting a flag anticipates "notifying by sending a message" because the claims do not include the limitation that "the message is not an error message". Applicants respectfully traverse. Claim 1 states "notifying one or more primary control units to temporarily stop sending data by sending a message" (emphasis added). Thus, the claim describes that the message is sent to notify the one or more primary control units to temporarily stop sending data.

In paragraph 16, the Reinemann patent application describes that a sharing policy specifies an upper limit, based on the age of the processor, for the amount of resources that a processor can consume. Each of the shared resources is monitored to assure the overall utilization of that resources is within the pre-determined upper threshold of the target range, the value of which can vary from one resource to another (paragraph 25). That is, an upper limit is associated with each processor and is used to determine whether that processor is exceeding its upper threshold. This, however, does not teach or suggest that the one or more primary control units that are notified to temporarily stop sending data are selected based on which ones are using a largest amount of resources.

Applicants respectfully submit that the Tzeng patent application also does not teach or suggest that the one or more primary control units that are notified to temporarily stop sending data are selected based on which ones are using a largest amount of resources.

Applicants respectfully submit that, even if combined, the Reinemann patent application and the Tzeng patent application do not teach or suggest that the one or more primary control units that are notified to temporarily stop sending data are selected based on which ones are using a largest amount of resources.

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Therefore claim 1 is not taught or suggested by the Reinemann patent application or the Tzeng patent application, either alone or together. Claims 9 and 17 are not taught or suggested by the Reinemann patent application or the Tzeng patent application, either alone or together, for at least the same reasons as were discussed with respect to claim 1.

Dependent claims 5-8, 13-16, and 21-24 incorporate the language of independent claims 1, 9, and 17 and add additional novel elements. Therefore, dependent claims 5-8, 13-16, and 21-24 are not taught or suggested by the Reinemann patent application or the Tzeng patent application, either alone or together, for at least the same reasons as were discussed with respect to claims 1, 9, and 17.

Claims 2, 10, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reinemann and Tzeng in further view of Applicants' admitted prior art. Applicants respectfully traverse.

As discussed above, neither the Reinemann patent application nor the Tzeng patent application, either alone or in combination, teaches or suggests the subject matter of claim 1. Applicants' respectfully submit that Applicants' Description of Related Art section does not cure the defects of the Reinemann and Tzeng patent applications as it does not teach or suggest selecting one or more primary control units that are notified to temporarily stop sending data based on which ones are using a largest amount of resources.

Dependent claims 2, 10, and 18 incorporate the language of independent claims 1, 9, and 17 and add additional novel elements. Therefore, dependent claims 2, 10, and 18 are not taught or suggested by the Reinemann patent application, the Tzeng patent application or Applicants' admitted prior art, either alone or in combination for at least the same reasons as were discussed with respect to claims 1, 9, and 17.

Claims 3-4, 11-12, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reinemann and Tzeng and further in view of Wong (Pub. US 2004/0003069 A1). Applicants respectfully traverse.

As discussed above, neither the Reinemann patent application nor the Tzeng patent application, either alone or in combination, teaches or suggests the subject matter of claim 1.

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The Wong patent application does not cure the defects of the Reinemann and Tzeng patent applications. For example, the Wong patent application does not teach or suggest selecting one or more primary control units that are notified to temporarily stop sending data based on which ones are using a largest amount of resources.

Applicants respectfully submit that, even if combined, the Reinemann patent application, the Tzeng patent application, and the Wong patent application do not teach or suggest the subject matter of claims 1, 9, and 17. Therefore, claims 1, 9, and 17 are not taught or suggested by the Reinemann patent application, the Tzeng patent application or the Wong patent application, either alone or together.


Dependent claims 3-4, 11-12, and 19-20 incorporate the language of independent claims 1, 9, and 17 and add additional novel elements. Therefore, dependent claims 3-4, 11-12, and 19-20 are not taught or suggested by the Reinemann patent application, the Tzeng patent application or the Wong patent application, either alone or in combination, for at least the same reasons as were discussed with respect to claims 1, 9, and 17.

Conclusion

For all the above reasons, Applicants submit that the pending claims 1-24 are patentable over the art of record. Applicants have not added any claims. Nonetheless, should any additional fees be required, please charge Deposit Account No. 09-0466.

The attorney of record invites the Examiner to contact her at (310) 553-7973 if the Examiner believes such contact would advance the prosecution of the case.

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